

**DEVELOPING AN AUTOMATED MAIL SERVER
MIGRATION TOOL FOR SENDMAIL TO MS EXCHANGE**

An Independent Research

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BY

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Abstract:

Mail servers provide messaging services for fast means of communication. Most companies have used mail servers so they could send and receive e-mails. However, companies don't use a generic mail server because different mail servers give a variety of services that matches specific functions of a company. Since companies use different mail servers, there is a need for mail migration from one mail server to another. Also considering the different operating systems (OS) used by some companies, there is also a need for migration from one OS to another. This study focuses on developing a mail migration tool for Sendmail in Linux to MS Exchange for Windows.

Keywords:

Mail server, mail migration, operating systems, migration tool, Sendmail, MS Exchange

CHAPTER I INTRODUCTION

1.1 Background of the Study

Mail servers provide messaging services. It is a vital tool for communication and cooperation in the corporate world today. Institutions such as schools and universities are equipped with their very own mail servers. Businesses such as banks are continually changing their mail servers to another because different mail servers offer a variety of services that would suit their particular need. Thus, mail server migration is not a rare occurrence in the business world nowadays.

Mail server migration is a tiresome procedure but a necessity. The manual process of migration is tedious and time consuming. The recreation of the new accounts happens in the new mail server. The next step would be to recreate the folders in each of those accounts. Forwarding of all the messages in the inbox and other folders of an account in the old mail server into the corresponding inbox and other folders of the new account in the new mail server follows. If there are any calendar notes and addresses in the address book of an account in the old mail server, they are also recreated on the new account in the new mail server.

In the local setting, some companies change their operating systems to suit their needs. With this event, the need for transferring contents of their mail servers came into importance. Migration tool for mail servers of different operating systems will be useful in this manner. Migration tools enable a swift and precise migration of the contents of different applications and services.

This study will help make the process of mail server migration in different operating systems easier and faster which would eliminate the need to use the conventional method. The group has decided to develop a migration tool specifically for Microsoft Exchange 2000 Server for Microsoft Windows and Sendmail for Linux.

1.2 Problem Statement

The present study seeks to answer the following general problem: How to develop a mail migration tool for mail servers in two different operating systems?

Specifically, it seeks to answer the following questions:

- How can we store the information obtained from a mail server?
- Where can the information be obtained from a mail server?
- How can we transfer and store the information from one mail server to another?
- What is a migration tool and what are its components?
- What are the existing migration tools?

1.3 Objective of the Study

The general objective of this research is to develop a mail migration tool for different mail servers for different operating systems.

The specific objectives are:

- To research on storing mail information from mail servers
- To identify different databases for information storage
- To research about mail migration
- To define migration tools and its components
- To identify different migration tools

1.4 Scope and Limitation of the Study

The study will be a migration of mail accounts, e-mail messages, e-mail outbox, and sent items from one mail server to another. The scope of the study would be migrating from Linux's Sendmail to Window's MS Exchange.

1.5 Significance of the Study

This study is significant for all companies using mail servers to send and receive mails between users. Mail migration would allow transferring of accounts from one mail server to another and from one operating system to another. Since transferring accounts would take a lot of time, mail migration lessens mail transfer time. Presently, there are still a lot of users of the Sendmail mail server. Yet, MS Exchange has a lot of capacities as a modern mail server in Windows. Exchange also has a lot of features allowing it to be a scalable and easy-to-maintain messaging application. Transferring from a basic mail server like Sendmail to MS Exchange would allow users to enjoy the additional features of MS Exchange.

1.6 Definition of Terms

- *Mail server* - A server used to store mail in a store-and-forward architecture. Workstations send mail to a mail server for on-forwarding, and retrieve any mail that might have been received from their electronic postbox.
- *Operating System* - The most important program that runs on a computer: the operating system ("OS") performs basic tasks such as recognizing input from the keyboard, sending output to the display screen, keeping track of files and directories on the disk, and controlling peripheral devices such as disk drives and

printers. PCs operating systems include DOS and Windows XP; Macintosh operating systems include OS 9.2 and OS X.

- *SendMail* - This is the most commonly used program on the Internet for sending e-mail via the SMTP protocol. Sendmail has been used on UNIX servers for a very long time and a version is available now for NT servers. Primarily, since sendmail does not provide a mailbox handling function, mail servers utilize other software such as IMAP or POP3 for this function.
- *Microsoft Exchange* - Messaging and enterprise collaboration server. Exchange's primary role is as an electronic mail message store but it can also store calendars, task lists, contact details, and other data.
- *Mail Migration* – Mail migration is the process of moving from use of one mail environment to another mail environment.
- *Migration Tool* – A migration tool is the software used for the process of migration user accounts and other components from one mail server to another mail server.
- *IMAP* – (Internet Message Access Protocol) A mail protocol that provides management of received messages on a remote server. The user can review headers, create or delete folders/mailboxes and messages, and search contents remotely without downloading.
- *POP3* - A standard for client/server transmission of e-mail. An e-mail server holds the e-mail, and you use a POP3 client to fetch the mail from a server. IMAP is a newer e-mail client/server protocol with more options.

- *DNS* – (Domain Name System) is a system that stores information about host names and domain names in a kind of distributed database on networks, such as the Internet. Most importantly, it provides an IP address for each host name, and lists the mail exchange servers accepting e-mail for each domain.
- *SMTP* – (Simple Mail Transfer Protocol) a protocol used to send e-mail on the Internet. SMTP is a set of rules regarding the interaction between a program sending e-mail and a program receiving e-mail.